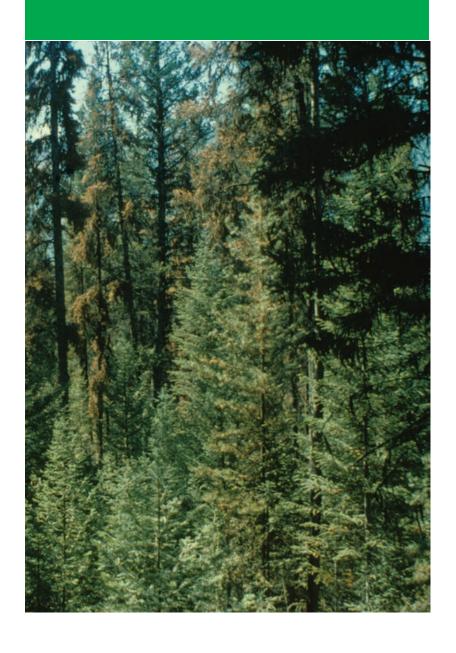
Balsam Boughs

An Important Minnesota Resource



Minnesota is a leader in the production of holiday wreaths and greenery, and one of the reasons for its lead is the State's large resource of balsam fir. Boughs harvested from balsam are used in almost all of the wreaths manufactured. This brochure answers several questions about harvesting bal-



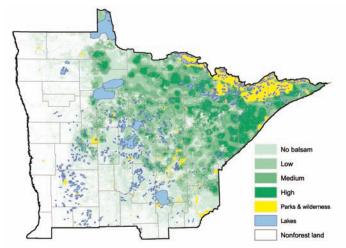
sam fir to help bough harvesters get ready for the coming season.

Where Do You Go To Find Balsam Fir?

Balsam fir is one of the most common tree species in Minnesota. This species is found on more than 30 percent (4.6 million acres) of the State's 15.3 million acres of forest land outside of parks and wilderness areas.

Of the 4.6 million acres where balsam fir is found, 17 percent (770,000 acres) contain at least 500 lbs. per acre of harvestable boughs while 5 percent (280,000 acres) contain at least 1,000 lbs. per acre of harvestable boughs.

The map below shows where harvesters can expect to find high levels of balsam boughs; however, the resource varies greatly within areas. Even within the dark green areas, some stands have very high levels of boughs and others few or no boughs. Yellow areas are parks and wilderness areas where harvesting boughs is prohibited.



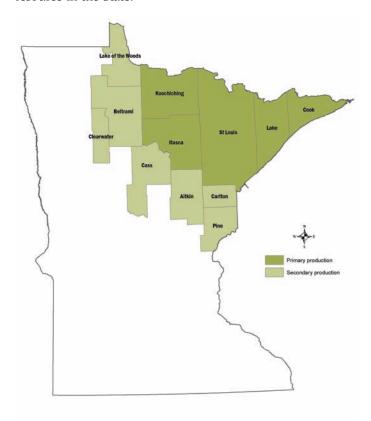
How Much Balsam Fir Bough Material Is Potentially Available?

More than 675,000 tons (of boughs that could be harvested within the guidelines on forest land outside of parks and

wilderness areas). Current harvesting is estimated to be 4,320 tons per year, somewhat less than 1 percent of the total resource. Although this rate of harvesting includes only a small fraction of the balsam resource, it is impacting that resource, especially where access is easiest—close to population centers and on forest land near roads.

Where Do People Harvest Boughs?

St. Louis, Aitkin, Itasca, and Cass Counties support the largest amount of harvesting of balsam boughs; however, they are not necessarily the top counties in terms of the available resource. Eight other counties (Lake, Koochiching, Cook, Beltrami, Lake of the Woods, Clearwater, Carlton, and Pine) also contain many balsam boughs. In total, these 12 counties contain over 97 percent of the balsam bough resource in the State.



The following table shows the distribution of the nonreserved forest area with balsam (4.6 million acres) among the major landowners. Other public includes counties not listed, U.S. Fish and Wildlife Service, and U.S. Army Corps of Engineers. Private includes tribal, forest industry, and miscellaneous small landowners.

Landowners and percentage of balsam fir they hold:

Owner	Percent
Minnesota Department of Natural Resources	27
Superior National Forest	16
St. Louis County	6
Koochiching County	2
Itasca County	1
Lake County	1
Aitkin, Cass, Beltrami, Becker	< 1
Other public	2
Private	37

State law requires a permit, written consent, or bill of sale to be carried whenever cutting, removing, or transporting boughs whether the land is publicly or privately owned.

How Do I Get A Permit?

Public Land

Approximately 60 percent of the balsam bough resource in Minnesota is on lands managed by 11 public agencies that issue permits to harvesters depending on the availability of the resource in particular areas. Permits for the most desirable areas for harvesting with easy access and a high concentration of balsam may be difficult to obtain where many people are harvesting. It's wise to



look for a harvesting area before the season begins.

Owner	Office location	Phone
Superior National	Grand Marais	(218) 387-1750
Forest	Ely	(218) 365-7600
	Cook	(218) 666-0020
	Aurora	(218) 229-8800
	Tofte	(218) 663-7280
Chippewa National	Blackduck	(218) 835-4291
Forest	Cass Lake	(218) 335-8600
	Deer River	(218) 246-2123
	Marcell	(218) 832-3161
	Walker	(218) 547-1044
Minnesota Department	•	
of Natural Resources		
	MINN-DNR	

Counties:		
St. Louis	Pike Lake	(218) 625-3729
Koochiching	International Falls	(218) 283-1128
Itasca	Grand Rapids	(218) 327-2855
Lake	Two Harbors	(218) 834-8340
Aitkin	Aitkin	(218) 927-7364
Cass	Backus	(218) 947-3338
Beltrami	Bemidji	(218) 333-4210
Becker	Detroit Lakes	(218) 847-0099
Clearwater	Bagley	(218) 694-6227
Carlton	Carlton	(218) 384-9179

Private Land

Harvesting on privately owned land requires written permission or a bill of sale from the landowner. Tribal lands are regulated by each band, and permits are issued primarily to band members.

In addition to the harvesting guidelines (height and diameter restrictions) most managers provide harvesters with either a specific area to harvest in (a section or other defined area) in which they are to harvest. Also, harvesting is typically not allowed within 50 feet of roads, lakes, rivers, and trails (skiing, hiking, snowmobile, ...) and within other designated areas such as campgrounds, picnic areas, or boat landings.

Harvesting Balsam Boughs Is Not An Easy Job

Much of the balsam bough resource in Minnesota is difficult to harvest because it is hard to get to. Only 40 percent of the total area with balsam fir is within 1,000 feet of a maintained road, and only 30 percent of the prime areas for harvesting (one ton of boughs or more per acre) are within 1,000 feet of a maintained road. Harvesting balsam boughs in some areas requires travel over unmaintained roads and logging roads. And harvesting balsam boughs requires not only cutting boughs, but also carrying bundles of boughs through the woods. It can be physically demanding work and is not for everyone.





USDA United States
Department of Agriculture



Forest Service North Central Research Station



Minnesota Department of Natural Resources